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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/642,430

08/15/2003

Peter C. Williams

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9883

24024 7590 07/27/2007
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EXAMINER

HEWITT, JAMES M

ART UNIT	PAPER NUMBER
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3679

MAIL DATE	DELIVERY MODE
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07/27/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/642,430

Applicant(s)

WILLIAMS, PETER C.

Examiner

James M. Hewitt

Art Unit

3679

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 1/8/07, 4/26/07 & 4/30/07.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) See Continuation Sheet is/are pending in the application.
- 4a) Of the above claim(s) 45-46, 49-51, 53-58 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 4, 5, 8, 11, 14, 16-18, 20, 22-24, 28, 32, 36, 38, 42, 47, 48, 60, 62, 63 and 66-88 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 1/8/07 & 4/30/07.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application
- ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 4/26/07 has been entered.

Election/Restrictions

Claims 45-46, 49-51 and 53-58 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 1/7/05.

Claim Objections

Claims 8, 73-75, 83-85 and 89-90 are objected to because of the following informalities:

In claim 8, line 1, "The-fitting" should be "The fitting".

In claim 73, line 1, "has a" should be deleted.

In claim 83, line 1, "has a" should be deleted.

In claim 89, line 2, "Vickers" should be inserted before "hardness" for clarity.

In claim 90, line 2, "Vickers" should be inserted before "hardness" for clarity.

Appropriate correction is required.

Double Patenting

Applicant is advised that should claim 87 be found allowable, claim 88 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-2, 4-5, 8, 11, 14, 16-18, 20, 22-24, 28, 32, 36, 38, 42, 47-48, 60, 62-63 and 66-88 are rejected under 35 U.S.C. 103(a) as being unpatentable over Williams et al (US 6,131,963) in view of Spontelli (US 4,076,286).

The Williams fitting discloses the claimed device, including a body (10/16, 110/116) having an interior bore, the bore having a camming surface at one end, except

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for the particular angle of the camming surface on the body. The radial shoulder (surface) facing the tube end at the second end of the bore is shown for example at 112a in FIG. 15. The ferrule back end being radially spaced from the tube end is shown for example in FIGS. 9, 11 and 13. Spontelli discloses a similar pipe joint wherein the camming surface on the body is between 30 and 50 degrees (col. 5, ll. 62-64). It would have been obvious to one having ordinary skill in the art at the time the invention was made to fabricate the camming surface angle of Williams et al to be at an angle of 45 degrees as taught by Spontelli, in order to provide a more secure coupling for the inserted tube by optimizing the resultant compressive forces between the ferrule and camming surface.

With respect to claim 16, the size of the tube being at least 0.5 inches is a feature that is considered old and well known in the pipe coupling art such that one of ordinary skill in the art would readily recognize that pipes are routinely sized according to the desired need. Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made to select a known size on the basis of its suitability for the intended use as a matter of obvious design choice.

With respect to claims 62, 63, 68 and 79, Williams et al fails to teach that the tube is a stainless steel tube. Stainless steel tubes are considered old and well known in the pipe coupling art. The selection of stainless steel in order to avoid corrosion is known. Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice.

Claims 89 and 90 are rejected under 35 U.S.C. 103(a) as being unpatentable over Williams et al (US 6,131,963) in view of Spontelli (US 4,076,286) as applied to claims 1 and 28 above, and further in view of Moreiras et al (US 3,893,716).

With respect to claim 89 and 90, the Williams et al and Spontelli combination as noted above discloses the claimed device, however the particular hardness of the ferrule relative to the tube is not specified. Moreiras et al provides a similar type coupling and states that the tube is a low carbon steel having a hardness below 20 on the Rockwell C scale, and requiring the hardness of the tube to be at least 15 points less than the hardness of the cutting edges of the sleeves. The sleeves are preferably of a hardness of 50 on the Rockwell C scale. A hardness of 50 on the Rockwell C scale translates to a Vickers hardness of 513 (HV/10). A hardness of 1 on the Rockwell C scale translates to a Vickers hardness of 160 (HV/10). Moreiras et al thus discloses that the hardness of the ferrule is 3.21. This ratio is not 3.3, but is sufficiently close such that one of ordinary skill in the art would expect the relationship between the ferrule and tube to exhibit the same properties. Further, it is envisaged to be within the scope of Moreiras et al to make the sleeves harder than 50 Rc. Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made to fabricate the degree of hardness between the tube and the ferrule as taught by Moreiras et al in order to provide a more secure coupling the for the inserted tube by optimizing the bite into the tube by the ferrule without over-deforming the tube and causing leakage at the bite area.

Response to Arguments

Applicant's arguments filed 4/26/07 have been fully considered but they are not persuasive.

Applicant asserts "The front ferrules 16 and 44 of Williams and Spontelli, respectively, do not include a generally radial shoulder facing the tube end, as recited in amended claims 1 and 28." In response, Examiner notes that the claimed body or fitting component has now been interpreted as body (10 or 110) and front ferrule (16 or 116) in Williams et al.

Conclusion

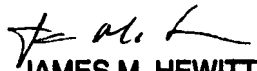
Any inquiry concerning this communication or earlier communications from the examiner should be directed to James M. Hewitt whose telephone number is 571-272-7084.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel Stodola can be reached on 571-272-7087. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JMH
7/20/07


JAMES M. HEWITT
PRIMARY EXAMINER

Continuation of Disposition of Claims: Claims pending in the application are 1,2,4,5,8,11,14,16-18,20,22-24,28,32,36,38,42,45-51,53-58,60,62,63 and 66-88.